

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
March 3, 2005 (03/03/2005)

PCT

(10) International Publication Number  
**WO 2005/018309 A1**

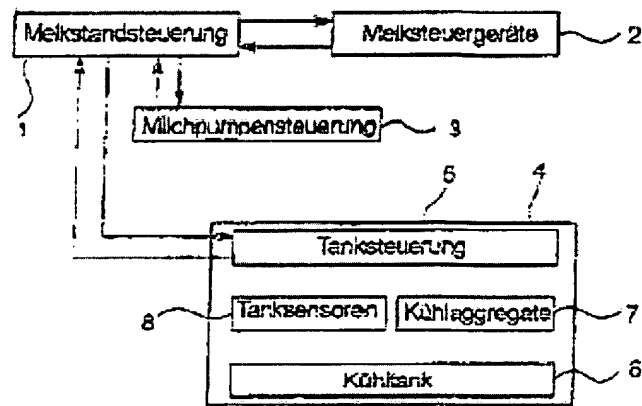
- (51) International Patent Classification<sup>7</sup>: A01J 9/04 (74) Attorneys: NEUMANN, Ditmar; KAHLHÖFER, NEUMANN, HERZOG, FIESSER, Karlstrasse 76, 40210 Düsseldorf (Germany)
- (21) International Application Number: PCT/EP2004/009086
- (22) International Filing Date: August 13, 2004 (8/13/2004) (81) Designated States (for each available type of national protection, unless given otherwise): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (25) Filing Language: German
- (26) Publication Language: German
- (30) Priority Data:  
103 37 264.4 August 13, 2003 (8/13/2003) DE
- (71) Applicant (for all designated States except US):  
WESTFALIASURGE GMBH [DE/DE]; Werner-Habig-Strasse 1, 59302 Oelde (Germany).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): KAEVER, Peter [DE/DE]; Fritz-Reuter-Strasse 23, 59302 Oelde (Germany).
- (84) Designated States (for each available type of regional protection, unless given otherwise): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Published:**

--- With international search report

For two-letter codes and other abbreviations refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

- 
- (54) Title: METHOD FOR PROVIDING DATA FOR A CONTROL SYSTEM FOR A MILK COOLING ARRANGEMENT OF A MILKING SYSTEM, AND METHOD FOR COOLING MILK IN A MILK COOLING ARRANGEMENT AND CONTROL SYSTEM FOR A MILK COOLING ARRANGEMENT



- 1 Milking parlor control
- 2 Milking control devices
- 3 Milk pump control
- 5 Tank control
- 6 Cooling tank
- 7 Cooling units
- 8 Tank sensors

(57) Abstract: In order to improve the functionality of a cooling arrangement (4), the invention provides a method for providing data for a control system for a milk cooling arrangement (4), a method for cooling milk in a milk cooling arrangement, and a control system. Data, which are relevant to the cooling tank and which are at least specific to the milk at at least two milking stations, are determined for the control system of a milk cooling arrangement of a milking system and are provided to said control system. At least one characteristic quantity is determined from this data, and the milk cooling arrangement is activated when at least one characteristic quantity lies outside a tolerance zone, particularly when it exceeds a predetermined threshold value. Shorter cooling times and an improved use of resources are achieved due to the interaction of the milking parlor control with the control system of a milk cooling arrangement. In addition, the invention enables an operator to set parameters and log the operation of the milk cooling arrangement in a convenient manner.